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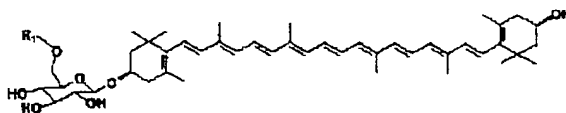
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KENKYUSHO:KK;

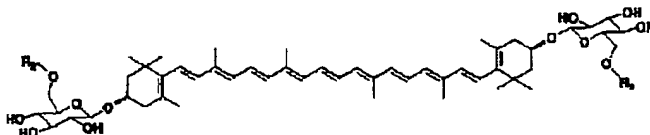
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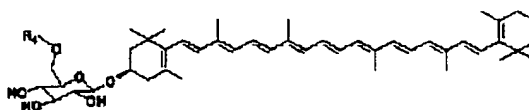
TITLE : NEW CAROTENOID



I



II



III

ABSTRACT : PURPOSE: To obtain a new carotenoid having high polarity and useful for a color tone improver or a color refreshing agent of fishes and shellfishes, etc., by comprising thermozeaxanthin, thermobiszeaxanthin and thermocryptoxanthin that are produced by a thermophile.

CONSTITUTION: This new carotenoid is composed of a thermozeaxanthin of formula I ( $R_1$  is an acyl), a thermobiszeaxanthin of formula II ( $R_2$  and  $R_3$  are each an acyl) and a thermocryptoxanthin of formula III and useful for a color tone improver or a color refreshing agent of culture fishes and shellfishes or an additive to foods. This new carotenoid is obtained by planting *Thermus thermophilus* ATCC 27634 as a thermophile into a medium, shake-culturing at 70°C for 24hr, collecting fungus bodies by centrifuging the cultured solution, extracting by adding acetone to the resultant solution, concentrating the resultant extracted solution, separating ethyl acetate fraction by adding water and ethyl acetate to the concentrated solution, concentrating, exsiccating and fractionating the exsiccated substance by a column chromatography.

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